

Title (en)

GYROSCOPIC BRAKE DEVICE AND METHOD

Title (de)

KREISELBREMSE UND KREISELREMSVERFAHREN

Title (fr)

FREIN GYROSCOPIQUE ET PROCEDE DE FREINAGE AVEC UN GYROSCOPE

Publication

EP 3487731 A1 20190529 (EN)

Application

EP 16750637 A 20160720

Priority

EP 2016067256 W 20160720

Abstract (en)

[origin: WO2018014947A1] The present invention relates to a braking device and method, and particularly but not exclusively relates to a gyroscopic braking device and method. A braking device (1) comprising a body (2) mounted for rotation about a first axis (101); means for rotating the body (2) about the first axis (101); comprises a second axis (102), a third axis (103) and a fourth axis (104), the braking device (1) being configured as to enable the body (2) to further rotate about the second axis (102) and the third axis (103), the first axis (101) being oriented with respect to the second axis (102) at an alpha angle (α) which is greater than 0 degrees, the second axis (102) being oriented with respect to the fourth axis (104) at a beta angle (β) which is greater than 0 degrees and less than 90 degrees, the third axis (103) being the precession axis about which the precession of the body (2) occurs as a result of rotating the body (2) about the first axis (101) and applying torque to the body (2) about the second axis (102).

IPC 8 full level

B60T 1/06 (2006.01); **B60T 1/10** (2006.01); **B60T 1/12** (2006.01); **B60T 13/06** (2006.01); **F16D 61/00** (2006.01); **F16D 63/00** (2006.01);
G01C 19/00 (2013.01)

CPC (source: EA EP IL KR US)

B60T 1/062 (2013.01 - EA EP IL KR US); **B60T 1/10** (2013.01 - EA EP IL KR US); **B60T 1/12** (2013.01 - EA EP IL KR);
B60T 13/06 (2013.01 - EA EP IL KR US); **F16D 61/00** (2013.01 - EA EP IL KR); **F16D 63/00** (2013.01 - EA EP IL KR US);
G01C 19/00 (2013.01 - IL KR); **G01C 19/02** (2013.01 - EA EP IL); **B60T 1/12** (2013.01 - US); **B60Y 2400/81** (2013.01 - IL KR);
F16D 61/00 (2013.01 - US); **F16D 2121/24** (2013.01 - EA EP IL KR US); **G01C 19/02** (2013.01 - US)

Citation (search report)

See references of WO 2018014947A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2018014947 A1 20180125; AR 109089 A1 20181024; CA 3030776 A1 20180125; CA 3030776 C 20230808; CN 109311455 A 20190205;
CN 109311455 B 20210727; EA 036123 B1 20201001; EA 201990153 A1 20190628; EP 3487731 A1 20190529; EP 3487731 B1 20200318;
ES 2798623 T3 20201211; IL 263019 A 20181231; IL 263019 B 20211201; JO P20170156 A1 20190130; JO P20170156 B1 20210817;
JP 2019522588 A 20190815; JP 2021156439 A 20211007; JP 7141146 B2 20220922; KR 102610334 B1 20231205;
KR 20190029621 A 20190320; MA 45698 B1 20200831; MX 2019000788 A 20190603; TW 201803753 A 20180201; US 10935091 B2 20210302;
US 2019293132 A1 20190926; UY 37330 A 20170929

DOCDB simple family (application)

EP 2016067256 W 20160720; AR P170102003 A 20170718; CA 3030776 A 20160720; CN 201680086888 A 20160720;
EA 201990153 A 20160720; EP 16750637 A 20160720; ES 16750637 T 20160720; IL 26301918 A 20181114; JO P20170156 A 20160720;
JP 2019500834 A 20160720; JP 2021107290 A 20210629; KR 20197002780 A 20160720; MA 45698 A 20160720; MX 2019000788 A 20160720;
TW 106122539 A 20170705; US 201616318018 A 20160720; UY 37330 A 20170719